

# Key Updates for Week 27, ending July 4, 2020

Nationally, levels of influenza-like illness (ILI) and COVID-19-like illness (CLI) activity continue to increase overall. The percentage of specimens testing positive for SARS-CoV-2, the virus that causes COVID-19, decreased slightly from last week; however, this past week included a holiday, which could impact both testing and reporting. Mortality attributed to COVID-19 decreased compared to last week and is currently at the epidemic threshold but will likely increase as additional death certificates are processed.

#### **Virus**

## Public Health, Commercial and Clinical Laboratories

The overall percentage of respiratory specimens testing positive for SARS-CoV-2 decreased from week 26 (9.2%) to week 27 (8.8%) nationally but increased in five regions. National percentages of specimens testing positive for SARS-CoV-2 by type of laboratory:

- Public health laboratories decreased from 6.4% during week 26 to 6.0% during week 27;
- Clinical laboratories increased from 5.7% during week 26 to 8.0% during week 27;
- Commercial laboratories decreased from 9.9% during week 26 to 9.4% during week 27.

# **Outpatient and Emergency Department Visits**

Outpatient Influenza-Like Illness Network (ILINet) and National Syndromic Surveillance Program (NSSP)

Two surveillance indicators are being used to track outpatient or emergency department (ED) visits for illness with symptoms compatible with COVID-19.

- Nationally, levels of ILI activity remain below baseline for the twelfth week and in all 10 surveillance regions for the past ten to thirteen weeks. However, most regions reported increases in percentage of visits for ILI, which is atypical for this time of year, and some parts of the country are seeing activity levels higher than levels seen in March and April. CLI also increased this past week.
- Recent changes in health care seeking behavior, including increasing use of telemedicine, recommendations to limit emergency department (ED) visits to severe illnesses, and increased practice of social distancing, are likely affecting data reported from both networks, making it difficult to draw conclusions at this time. Tracking these systems moving forward will give additional insight into illness related to COVID-19.

## **Severe Disease**

#### **Hospitalizations**

Cumulative COVID-19-associated hospitalization rates since March 1, 2020, are updated weekly. The overall cumulative COVID-19 hospitalization rate is 107.2 per 100,000, with the highest rates in people aged 65 years and older (316.9 per 100,000) and 50-64 years (161.7 per 100,000).

#### **Mortality**

Based on death certificate data, the percentage of deaths attributed to pneumonia, influenza or COVID-19 (PIC) decreased from 6.9% during week 26 to 5.5% during week 27, representing the eleventh week of a declining percentage of deaths due to PIC. The percentage is currently below the epidemic threshold but will likely change as more death certificates are processed, particularly for recent weeks.

All data are preliminary and may change as more reports are received.

A description of the surveillance systems summarized in COVIDView, including methodology and detailed descriptions of each data component, is available on the <u>surveillance methods</u> page.

# **Key Points**

- There are increases in the percentage of specimens testing positive for SARS-CoV-2 and percentage of visits for ILI or CLI in multiple parts of the country. Three HHS regions (Regions 4 [South East], 6 [South Central] and 9 [South West/Coast]) are reporting percentage of visits for CLI and/or percentage of specimens testing positive for SARS-CoV-2 at higher levels than was seen in March/April.
- Using combined data from the three laboratory types, the national percentage of respiratory specimens testing positive for SARS-CoV-2 with a molecular assay decreased slightly from week 26 (9.2%) to week 27 (8.8%).
  - o Increases were reported in five of ten HHS surveillance regions: Regions 2 (NY/NJ/Puerto Rico), 4 (South East), 5 (Midwest), 6 (South Central), and 7 (Central).
    - The highest percentages of specimens testing positive for SARS-CoV-2 were seen in Regions 4 (14.1%), 6 (16.8%) and 9 (11.3%).
  - Five regions (Regions 1 [New England], 3 [Mid-Atlantic], 8 [Mountain], 9 [South West/Coast] and 10 [Pacific Northwest] reported a stable or decreasing percentage of specimens testing positive for SARS-CoV-2.
- The percentage of outpatient and emergency department visits for ILI are below baseline nationally and in all regions of the country; however, increases in the percentage of visits for ILI and/or CLI were reported in seven of ten HHS surveillance regions, with the largest increases in Regions 4 (South East), 6 (South Central) and 9 (South West/Coast).
  - Systems monitoring ILI and CLI may be influenced by recent changes in health care seeking behavior, including increasing use of telemedicine, recommendations to limit emergency department (ED) visits to severe illnesses, and increased practice of social distancing.
- The overall cumulative COVID-19 associated hospitalization rate is 107.2 per 100,000, with the highest rates in people 65 years of age and older (316.9 per 100,000) followed by people 50-64 years (161.7 per 100,000). Hospitalization rates are cumulative and will increase as the COVID-19 pandemic continues.
  - Non-Hispanic American Indian or Alaska Native persons have an age-adjusted hospitalization rate approximately 5.7 times that of non-Hispanic White persons, non-Hispanic Black persons have a rate approximately 4.7 times that of non-Hispanic White persons, and Hispanic or Latino persons have a rate approximately 4.6 times that of non-Hispanic White persons.
  - Cumulative hospitalization rates for COVID-19 in adults (18-64 years) at this time are higher than cumulative end-of-season hospitalization rates for influenza over each of the past 5 influenza seasons.
  - o For people 65 years and older, current cumulative COVID-19 hospitalization rates at this time are higher than cumulative end-of season hospitalization rates for influenza for 4 of the 5 past influenza seasons; lower only than rates observed during the 2017-18 season.
  - For children (0-17 years), cumulative COVID-19 hospitalization rates are much lower than cumulative influenza hospitalization rates at comparable time points\* during recent influenza seasons.
- Based on death certificate data, the percentage of deaths attributed to pneumonia, influenza or COVID-19 (PIC) decreased from 6.9% during week 26 to 5.5% during week 27, representing the eleventh consecutive week during which a declining percentage of deaths due to PIC has been recorded. The percentage is currently below the epidemic threshold but will likely change as additional death certificates for deaths during recent weeks are processed.

<sup>\*</sup>Number of weeks since 10% of specimens tested positive for SARS-CoV-2 and influenza, respectively.



#### U.S. Virologic Surveillance

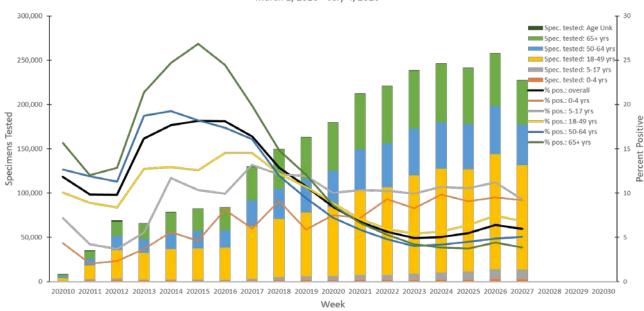
The number of specimens tested for SARS-CoV-2 using a molecular assay and reported to CDC by public health laboratories and a subset of clinical and commercial laboratories in the United States are summarized below. All laboratories are performing primary diagnostic functions; therefore, the percentage of specimens testing positive across laboratory types can be used to monitor overall trends in COVID-19 activity. As the outbreak progresses, it is possible that different types of laboratories will take on different roles, and the data interpretation may need to change.

Summary of Laboratory Testing Results Reported to CDC*	Week 27 (June 28 – July 4, 2020)	Cumulative since March 1, 2020		
No. of specimens tested	1,723,770	22,622,762		
Public Health Laboratories	227,484	2,693,456		
Clinical Laboratories	134,818	2,194,464		
Commercial Laboratories	1,361,468	17,734,842		
No. of positive specimens (%)	151,949 (8.8%)	2,176,626 (9.6%)		
Public Health Laboratories	13,589 (6.0%)	233,973 (8.7%)		
Clinical Laboratories	10,837 (8.0%)	136,501 (6.2%)		
Commercial Laboratories	128,077 (9.4%)	1,806,152 (10.2%)		

<sup>\*</sup> Commercial and clinical laboratory data represents select laboratories and does not capture all tests performed in the United States.

#### **Public Health Laboratories**





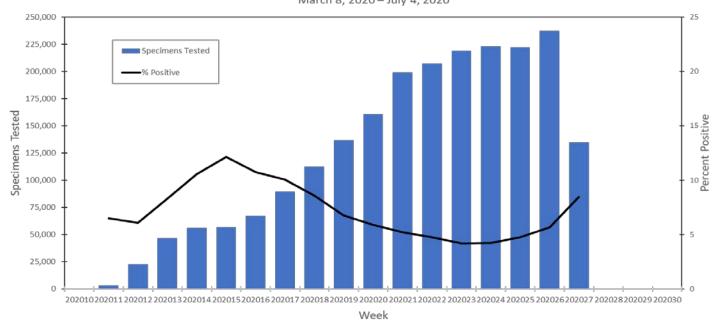


#### **Clinical Laboratories**

U.S. Clinical Laboratories Reporting to the National Respiratory and Enteric Virus Surveillance System:

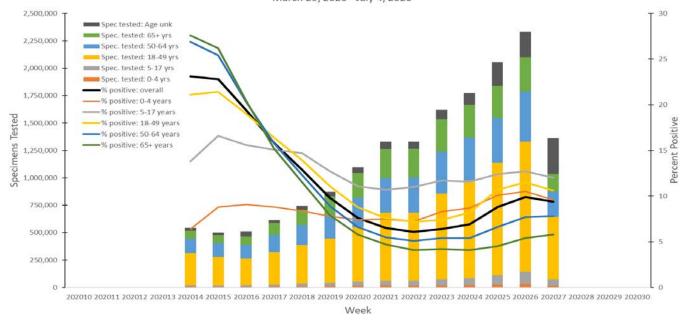
Number of Specimens Tested and Percent Positive for SARS-CoV-2

March 8, 2020 – July 4, 2020



#### **Commercial Laboratories**

Select Commercial Laboratories Reporting to CDC: Number of Specimens Tested and Percent Positive for SARS-CoV-2 March 29, 2020 - July 4, 2020



<sup>\*</sup> Commercial laboratories began testing for SARS-CoV-2 in early March, but the number and geographic distribution of reporting commercial laboratories became stable enough to calculate a weekly percentage of specimens testing positive as of March 29, 2020.

## Additional virologic surveillance information: Surveillance Methods



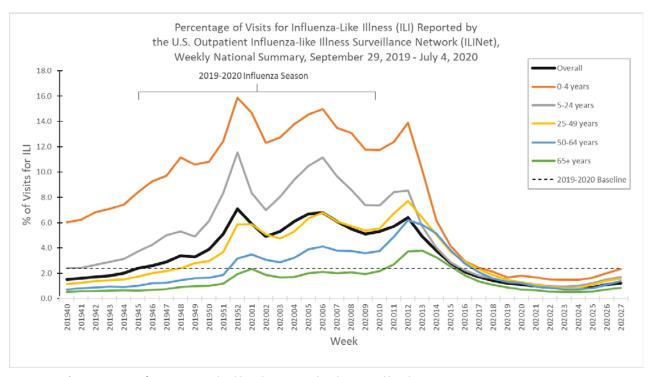
## **Outpatient/Emergency Department Illness**

Two syndromic surveillance systems are being used to monitor trends in outpatient and emergency department visits that may be associated with COVID-19 illness. Each system monitors a slightly different syndrome, and together these systems provide a more comprehensive picture of mild to moderate COVID-19 illness than either would individually. Both systems are currently being affected by recent changes in healthcare seeking behavior, including increased use of telemedicine, compliance with recommendations to limit emergency department (ED) visits to severe illnesses, and increased practice of social distancing. These changes affect the numbers of people seeking care in the outpatient and ED settings and their reasons for doing so.

#### **ILINet**

The U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet) provides data on visits for influenza-like illness (ILI) (fever [≥100°F] and cough and/or sore throat) to approximately 2,600 primary care providers, emergency departments and urgent care centers in all 50 states, Puerto Rico, the District of Columbia and the U.S. Virgin Islands. Mild COVID-19 illness presents with symptoms similar to ILI, so ILINet is being used to track trends of mild to moderate COVID-19 illness and allows for comparison with prior influenza seasons.

Nationwide during week 27, 1.2% of patient visits reported through ILINet were due to ILI. This percentage is well below the national baseline of 2.4% but is increasing, which is atypical for this time of year compared to previous influenza seasons. The pattern of increasing percentage of visits for ILI was reported for all age groups. Nationally, <u>laboratory-confirmed influenza activity as reported by clinical laboratories</u> is at levels usually seen during summer months which, along with changes in healthcare seeking behavior and the impact of social distancing, is likely contributing to the low level of ILI activity.



 $<sup>\</sup>ensuremath{^{*}}$  Age-group specific percentages should not be compared to the national baseline.



On a <u>regional level</u>, the percentage of outpatient visits for ILI ranged from 0.5% to 2.2% during week 27. All ten regions are below their region-specific baselines; however, Region 4 (South East) increased from 1.7% during week 26 to 2.1% during week 27, Region 6 (South Central) increased from 1.9% to 2.2%, Region 7 (Central) increased from 0.8% to 0.9%, and Region 10 (Pacific Northwest) increased from 0.7% to 0.8%; Regions 2 (NY/NY/PR) and 8 (Mountain) also reported slight increases.

Note: In response to the COVID-19 pandemic, new data sources will be incorporated into ILINet as we move into summer weeks when lower levels of influenza and other respiratory virus circulation are typical. Starting in week 21, increases in the number of patient visits will be seen as new sites are enrolled and the percentage of visits for ILI may change in comparison to previous weeks. While all regions remain below baseline levels for ILI, these system changes should be kept in mind when drawing conclusions from these data. Any changes in ILI due to changes in respiratory virus circulation will be highlighted here.

## **ILI Activity Levels**

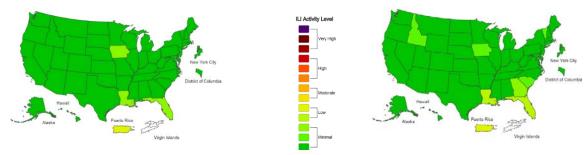
Data collected in ILINet are used to produce a measure of <u>ILI activity</u> for all 50 states, Puerto Rico, the District of Columbia and New York City. The mean reported percentage of visits due to ILI for the current week is compared to the mean reported during non-influenza weeks, and the activity levels correspond to the number of standard deviations below, at or above the mean.

The number of jurisdictions at each activity level during week 26 and the change compared to the previous week are summarized in the table below and shown in the following maps.

	Number of Jurisdictions				
Activity Level	Week 27 (Week ending July 4, 2020)	Compared to Previous Week			
Very High	0	No change			
High	0	No change			
Moderate	0	No change			
Low	3	+2			
Minimal	50	-2			
Insufficient Data	1	No change			

#### ILI Activity Level Map, Week 26, Ending June 27, 2020

#### ILI Activity Level Map, Week 27, Ending July 4, 2020

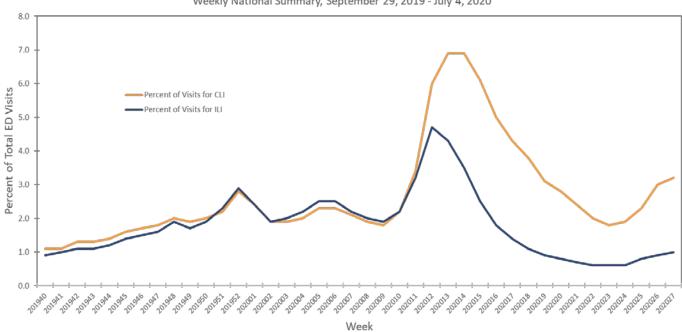


<sup>\*</sup>Data collected in ILINet may disproportionally represent certain populations within a state and may not accurately depict the full picture of influenza activity for the whole state. Differences in the data presented here by CDC and independently by some state health departments likely represent differing levels of data completeness with data presented by the state likely being the more complete.



National Syndromic Surveillance Program (NSSP): Emergency Department (ED) Visits NSSP is a collaboration among CDC, federal partners, local and state health departments and academic and private sector partners to collect, analyze and share electronic patient encounter data received from multiple healthcare settings. To track trends of potential COVID-19 visits, visits for COVID-19-like illness (CLI) (fever and cough or shortness of breath or difficulty breathing or presence of a coronavirus diagnosis code) and ILI to a subset of emergency departments in 47 states are being monitored.

Nationwide during week 27, 3.2% of emergency department visits captured in NSSP were due to CLI and 1.0% were due to ILI. This is the third week of an increasing percentage of visits for CLI and ILI nationally since activity peaked in early April. Compared to week 26, 5 of 10 HHS regions (Regions 4 [South East], 6 [South Central], 7 [Central], 9 [South West/Coast] and 10 [Pacific Northwest]) reported increases in the percentages of visits for both CLI and ILI during week 27. Region 3 (Mid-Atlantic) reported a slight increase in percentage of visits for ILI during week 27, and Region 5 (Midwest) reported an increase in the percentage of visits for ILI during week 27.



NSSP: Percentage of Visits for Influenza-Like Illness (ILI) and COVID-19-Like Illness (CLI) to Emergency Departments
Weekly National Summary, September 29, 2019 - July 4, 2020

Additional information about medically attended outpatient and emergency department visits for ILI and CLI: <u>Surveillance Methods</u>



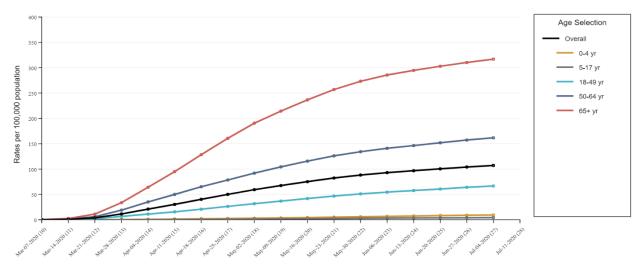
## **Hospitalizations**

The COVID-19-Associated Hospitalization Surveillance Network (COVID-NET) conducts population-based surveillance for laboratory-confirmed COVID-19-associated hospitalizations in select counties participating in the Emerging Infections Program (EIP) and the Influenza Hospitalization Surveillance Project (IHSP).

A total of 34,791 laboratory-confirmed COVID-19-associated hospitalizations were reported by sites between March 1, 2020 and July 4, 2020. The overall cumulative hospitalization rate was 107.2 per 100,000 population. Among the 0-4 years, 5-17 years, 18-49 years, 50-64 years, and  $\geq$  65 years age groups, the highest rate of hospitalization is among adults aged  $\geq$  65, followed by adults aged 50-64 years and adults aged 18-49 years.

## Laboratory-Confirmed COVID-19-Associated Hospitalizations



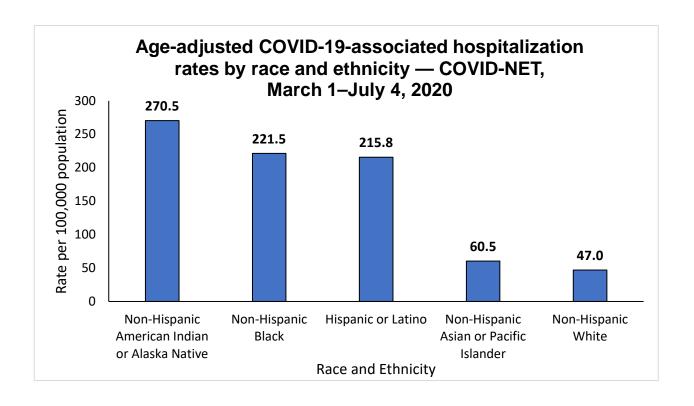


Calendar Week End Date (MMWR Week No.)

Age Group	Cumulative Rate per 100,000 Population
Overall	107.2
0-4 years	9.4
5-17 years	4.4
18-49 years	66.7
18-29 years	37.8
30-39 years	66.3
40-49 years	104.4
50-64 years	161.7
65+ years	316.9
65-74 years	230.6
75-84 years	381.5
85+ years	590.3



Among the 34,791 laboratory-confirmed COVID-19-associated hospitalized cases, 32,766 (94.2%) had information on race and ethnicity while collection of race and ethnicity was still pending for 2,025 (5.8%) cases. When examining overall age-adjusted rates by race/ethnicity, non-Hispanic American Indian or Alaska Native persons have an age-adjusted hospitalization rate approximately 5.8 times that of non-Hispanic White persons, non-Hispanic Black persons have a rate approximately 4.7 times that of non-Hispanic White persons, and Hispanic or Latino persons have a rate approximately 4.6 times that of non-Hispanic White persons.





When examining age-stratified crude hospitalization rates by race and ethnicity, compared with non-Hispanic white persons in the same age group, crude hospitalization rates were 8.7 times higher among Hispanic or Latino persons aged 0-17 years; 11.2 times higher among non-Hispanic American Indian or Alaska Native persons aged 18-49 years; 9.9 times higher among non-Hispanic Black persons aged 50-64 years; and 7.0 times higher among non-Hispanic Black person aged ≥65 years. Additional data on race and ethnicity by age are available.

# Hospitalization rates per 100,000 population by age and race and ethnicity\* — COVID-NET, March 1, 2020–July 4, 2020

Non-Hispanic American Indian or Age Category Alaska Native		Non-Hispanic Black		Hispanic or Latino		Non-Hispanic Asian or Pacific Islander		Non-Hispanic White		
	Rate <sup>1</sup>	Rate Ratio <sup>2</sup>	Rate <sup>1</sup>	Rate Ratio <sup>2</sup>	Rate <sup>1</sup>	Rate Ratio <sup>2</sup>	Rate <sup>1</sup>	Rate Ratio <sup>2</sup>	Rate <sup>1</sup>	Rate Ratio <sup>2</sup>
0-17y	5.9	4.5	6.4	4.9	11.3	8.7	3.4	2.6	1.3	1.0
18-49y	185.4	11.2	110.5	6.7	132.7	8.0	28.4	1.7	16.5	1.0
50-64y	474.2	8.1	583.2	9.9	201.2	3.4	92.8	1.6	58.8	1.0
65 <b>+</b> y	584.2	3.1	1328.6	7.0	209.7	1.1	212.5	1.1	189.5	1.0
Overall rate <sup>3</sup> (age-adjusted)	270.5	5.8	221.5	4.7	215.8	4.6	60.5	1.3	47.0	1.0

<sup>&</sup>lt;sup>1</sup> COVID-19-associated hospitalization rates by race/ethnicity are calculated using hospitalized COVID-NET cases with known race and ethnicity for the numerator and NCHS bridged-race population estimates for the denominator.



<sup>&</sup>lt;sup>2</sup> For each age category, rate ratios are the ratios between crude hospitalization rates within each racial/ethnic group and the crude hospitalization rate among non-Hispanic white persons in the same age category.

<sup>&</sup>lt;sup>3</sup> Overall rates are adjusted to account for differences in age distributions within race/ethnicity strata in the COVID-NET catchment area; the age strata used for the adjustment include 0-17, 18-49, 50-64, and 65+ years.

Non-Hispanic White persons and non-Hispanic Black persons represent the highest proportions of hospitalized cases reported to COVID-NET, followed by Hispanic or Latino, non-Hispanic Asian or Pacific Islander, and non-Hispanic American Indian or Alaska Native persons. However, some racial and ethnic groups are disproportionately represented among hospitalized cases as compared with the overall population of the catchment area. Prevalence ratios show a similar pattern to that of the age-adjusted hospitalization rates: non-Hispanic American Indian or Alaska Native persons have the highest prevalence ratio, followed by non-Hispanic Black and Hispanic or Latino persons.

# Comparison of proportions of COVID-19-Associated Hospitalizations, by race and ethnicity, COVID-NET, March 1–July 4, 2020

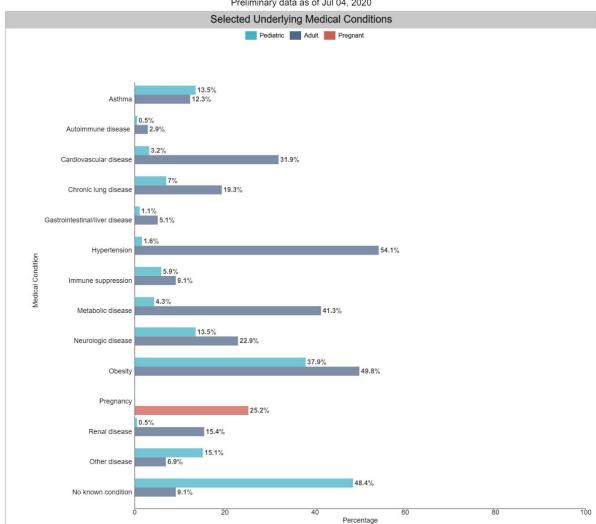
	Non-Hispanic American Indian or Alaska Native	Non- Hispanic Black	Hispanic or Latino	Non-Hispanic Asian or Pacific Islander	Non- Hispanic White
Proportion of hospitalized COVID- NET cases <sup>1</sup>	1.6%	32.6%	22.4%	4.7%	32.2%
Proportion of population in COVID-NET catchment area	0.7%	17.7%	14.0%	8.8%	58.8%
Prevalence ratios <sup>2</sup>	2.3	1.8	1.6	0.5	0.5

<sup>&</sup>lt;sup>1</sup> Persons of multiple races (0.2%) or unknown race and ethnicity (5.8%) are not represented in the table but are included as part of the denominator.



<sup>&</sup>lt;sup>2</sup> Prevalence ratio is calculated as the ratio of the proportion of hospitalized COVID-NET cases over the proportion of population in COVID-NET catchment area.

Among 9,130 hospitalized adults with information on underlying medical conditions, 90.9% had at least one reported underlying medical condition. The most commonly reported were hypertension, obesity, chronic metabolic disease, and cardiovascular disease. Among 186 hospitalized children with information on underlying conditions, 51.6% had at least one reported underlying medical condition. The most commonly reported were obesity, asthma, and neurologic conditions.



COVID-19 Laboratory-Confirmed Hospitalizations Preliminary data as of Jul 04, 2020

<u>Additional data</u> on demographics, signs and symptoms at admission, underlying conditions, interventions, outcomes, and discharge diagnoses, stratified by age, sex, and race and ethnicity, are available.

## Additional hospitalization surveillance information:

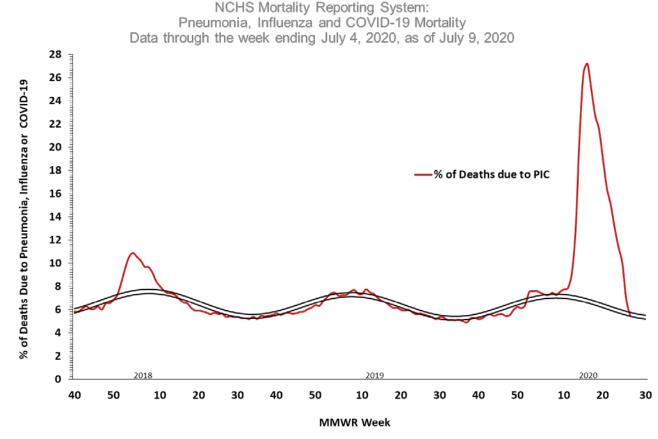
Surveillance Methods | Additional rate data | Additional demographic and clinical data



## **Mortality Surveillance**

The National Center for Health Statistics (NCHS) collects death certificate data from vital statistics offices for all deaths occurring in the United States. Based on death certificate data available on July 9, 2020, 5.5% of all deaths occurring during the week ending July 4, 2020 (week 27) were due to pneumonia, influenza or COVID-19 (PIC). This is the eleventh consecutive week of a declining percentage of deaths due to PIC. The percentage is below the epidemic threshold of 5.8% for week 27, but above the baseline of 5.4%. Data for recent weeks are incomplete, and the PIC percentage may increase as more death certificates representing deaths during these weeks are processed.

Weekly mortality surveillance data include a combination of machine coded and manually coded causes of death collected from death certificates. Percentages of deaths due to PIC are higher among manually coded records than more rapidly available machine coded records. Due to the additional time needed for manual coding, the initially reported PIC percentages may be lower than percentages calculated from final data.



\*Data during recent weeks are incomplete because of the lag in time between when the death occurred and when the death certificate is completed, submitted to NCHS and processed for reporting purposes.

Additional NCHS mortality surveillance information: <u>Surveillance Methods</u> | <u>Provisional Death Counts for COVID-19</u>

Report prepared: July 9, 2020

Detailed data tables are available on the COVIDView page

